

## **PLATE JOINER**

### **ABSTRACT**

A plate joiner including a fence support, a drive, and a fence system. The fence support includes a cutter and a contact surface, which defines a cutter slot. The cutter is arranged and configured to protrude from fence support through cutter slot to make a plunge cut into a surface of a workpiece when the contact surface is pressed against the surface and the cutter is plunged into the workpiece by pushing on a rearward handle portion of the tool. The drive is arranged and configured to rotatably drive the cutter through a motor.

A preferred fence system includes an angle adjustment system arranged and configured to position the fence at a wide range of fence angles and, at any selected distance from a top face of the workpiece to the fence, the distance from the top face of the workpiece to the cutter remains constant as the front fence angle is adjusted. A preferred fence system includes a trunnion which pivotally couples the front fence to the fence system. A preferred fence system also includes an angle segment member, which has two slots used to position the fence in two ranges of fence angles.